CLAIM AMENDMENTS

1-46 (Cancelled)

47. (Previously Presented) The disk drive of claim 87, wherein the first track includes an AGC field and a burst field, and one of the first and second data patterns is located in one of the AGC and burst fields.

48. (Previously Presented) The disk drive of claim 47, wherein the first data pattern is located in the AGC field.

49. (Previously Presented) The disk drive of claim 48, wherein the second data pattern is located in the AGC field.

50. (Previously Presented) The disk drive of claim 47, wherein the second data pattern is located in the burst field, and the burst field is used primarily during seek and settling operations.

51-52 (Cancelled)

53. (Previously Presented) The disk drive of claim 47, wherein the first data pattern is located in the AGC field and the second data pattern is located in the burst field.

54. (Previously Presented) The disk drive of claim 53, wherein the burst field is one of a C burst field and a D burst field.

55. (Previously Presented) The disk drive of claim 54, wherein the first track includes an A burst field and a B burst field between the first and second data patterns.

56. (Previously Presented) The disk drive of claim 55, wherein the A, B, C and D burst fields are located in a single servo region, the A and B burst fields are used primarily during track following operations, and the C and D burst fields are used primarily during seek and settling operations.

57. (Previously Presented) The disk drive of claim 87, wherein the detection circuit determines whether the head is within an acceptable flying height range in response to a peak count of a detection signal based on a data pattern that includes at least one of the first and second data patterns.

58. (Previously Presented) The disk drive of claim 57, wherein the data pattern is a constant frequency pattern.

59-60 (Cancelled)

61. (Previously Presented) The disk drive of claim 57, wherein the detection circuit includes a transition detector and a counter, and an output of the transition detector is coupled to an input of the counter.

62. (Previously Presented) The disk drive of claim 61, wherein the transition detector detects a transition in the detection signal only when the detection signal exceeds a predetermined threshold value.

63. (Previously Presented) The disk drive of claim 62, wherein the counter counts the number of transitions in the detection signal detected by the transition detector and provides the peak count.

64. (Previously Presented) The disk drive of claim 63, wherein the detection circuit includes a memory, and the memory provides a calibration value corresponding to a data storage

location on the track that is accessed during one of a read and write operation while the data pattern is read to provide the detection signal.

65. (Previously Presented) The disk drive of claim 64, wherein the detection circuit determines whether the head is within an acceptable flying height range in response to the peak count and the calibration value.

66. (Previously Presented) The disk drive of claim 65, wherein the detection circuit postpones the operation if the detection circuit determines that the head is not within an acceptable flying height range.

67-86 (Cancelled)

87. (Currently Amended) A disk drive, comprising:

a disk having a plurality of concentric tracks for storing data, the tracks including a first track having a first data pattern with a first frequency and a second data pattern with a second frequency that is higher than the first frequency, wherein the first and second data patterns are located in separate non-overlapping circumferential portions of the first track;

a head for reading data from and writing data to the disk; and

a detection circuit that determines whether the head is within an acceptable flying height range in response to the first and second data patterns while the head is at a substantially constant flying height.

88. (Previously Presented) The disk drive of claim 87, wherein the second data pattern is a constant frequency pattern.

89-90 (Cancelled)

91. (Previously Presented) The disk drive of claim 87, wherein the second data pattern is located in an AGC field.

92. (Previously Presented) The disk drive of claim 87, wherein the second data pattern is located in a servo burst field.

93. (Previously Presented) The disk drive of claim 87, wherein the detection circuit determines whether the head is within an acceptable flying height range while the head is at a non-predetermined flying height.

94. (Previously Presented) The disk drive of claim 87, wherein the detection circuit includes a transition detector, a counter, and a memory, an output of the transition detector is coupled to an input of the counter, and outputs of the counter and the memory are coupled to an output of the detection circuit.

95. (Previously Presented) The disk drive of claim 94, wherein the transition detector detects a transition in a detection signal based on the second data pattern only when the detection signal exceeds a predetermined threshold value, the counter counts the number of transitions in the detection signal detected by the transition detector and provides a peak count, the memory provides a calibration value corresponding to a data storage location on the track that is accessed during one of a read and write operation while the first and second data patterns are read, and the detection circuit determines whether the head is within an acceptable flying height range in response to the peak count and the calibration value.

96. (Previously Presented) The disk drive of claim 95, wherein the detection circuit postpones the operation if the detection circuit determines that the head is not within an acceptable flying height range.

97. (Previously Presented) A disk drive, comprising:

a disk having a plurality of concentric tracks for storing data, the tracks including a first track having a first data pattern with a first frequency and a second data pattern with a second

frequency that is higher than the first frequency, wherein the first and second data patterns are located in separate non-overlapping circumferential portions of the first track;

a head for reading data from and writing data to the disk; and

a detection circuit that determines whether the head is within an acceptable flying height range in response to the first and second data patterns without moving the head to a substantially different flying height.

98. (Previously Presented) The disk drive of claim 97, wherein the second data pattern is a constant frequency pattern.

99-100 (Cancelled)

101. (Previously Presented) The disk drive of claim 97, wherein the second data pattern is located in an AGC field.

102. (Previously Presented) The disk drive of claim 97, wherein the second data pattern is located in a servo burst field.

103. (Previously Presented) The disk drive of claim 97, wherein the detection circuit determines whether the head is within an acceptable flying height range while the head is at a non-predetermined flying height.

104. (Previously Presented) The disk drive of claim 97, wherein the detection circuit includes a transition detector, a counter, and a memory, an output of the transition detector is coupled to an input of the counter, and outputs of the counter and the memory are coupled to an output of the detection circuit.

105. (Previously Presented) The disk drive of claim 104, wherein the transition detector detects a transition in a detection signal based on the second data pattern only when the detection signal exceeds a predetermined threshold value, the counter counts the number of transitions in

the detection signal detected by the transition detector and provides a peak count, the memory provides a calibration value corresponding to a data storage location on the track that is accessed during one of a read and write operation while the first and second data patterns are read, and the detection circuit determines whether the head is within an acceptable flying height range in response to the peak count and the calibration value.

106. (Previously Presented) The disk drive of claim 105, wherein the detection circuit postpones the operation if the detection circuit determines that the head is not within an acceptable flying height range.

107 (Cancelled)

108. (Previously Presented) The disk drive of claim 87, wherein the first and second data patterns are circumferentially spaced from one another.

109. (Previously Presented) The disk drive of claim 87, wherein the first and second data patterns each intersect a centerline of the first track.

110. (Previously Presented) The disk drive of claim 87, wherein the first data pattern is circumferentially adjacent to a first user data field on the first track.

111. (Previously Presented) The disk drive of claim 110, wherein the second data pattern is circumferentially adjacent to a second user data field on the first track.

112. (Previously Presented) The disk drive of claim 87, wherein the first and second data patterns are circumferentially adjacent to and separated by a region of the first track that is devoid of a user data field.

113. (Previously Presented) The disk drive of claim 112, wherein the region of the first track contains two servo burst fields between the first and second data patterns.

114 (Cancelled)

115. (Previously Presented) The disk drive of claim 87, wherein only one of the first and second data patterns provides servo positioning information.

116-117 (Cancelled)

118. (Previously Presented) The disk drive of claim 97, wherein the first and second data patterns are circumferentially spaced from one another.

119. (Previously Presented) The disk drive of claim 97, wherein the first and second data patterns each intersect a centerline of the first track.

120. (Previously Presented) The disk drive of claim 97, wherein the first data pattern is circumferentially adjacent to a first user data field on the first track.

121. (Previously Presented) The disk drive of claim 120, wherein the second data pattern is circumferentially adjacent to a second user data field on the first track.

122. (Previously Presented) The disk drive of claim 121, wherein the first and second data patterns are circumferentially adjacent to and separated by a region of the first track that is devoid of a user data field.

123. (Previously Presented) The disk drive of claim 122, wherein the region of the first track contains two servo burst fields between the first and second data patterns.

124 (Cancelled)

125. (Previously Presented) The disk drive of claim 97, wherein only one of the first and second data patterns provides servo positioning information.

126. (Previously Presented) The disk drive of claim 97, wherein both of the first and second data patterns provide servo positioning information.